MDOT
Michigan Department of Transportation

BRIDGE ADVISORY
Design Division
Bridge Management Section

BRIDGE ADVISORY NUMBER: **BA-2016-03** DATE: August 13, 2016

SUBJECT: **Load Rating Method Update**

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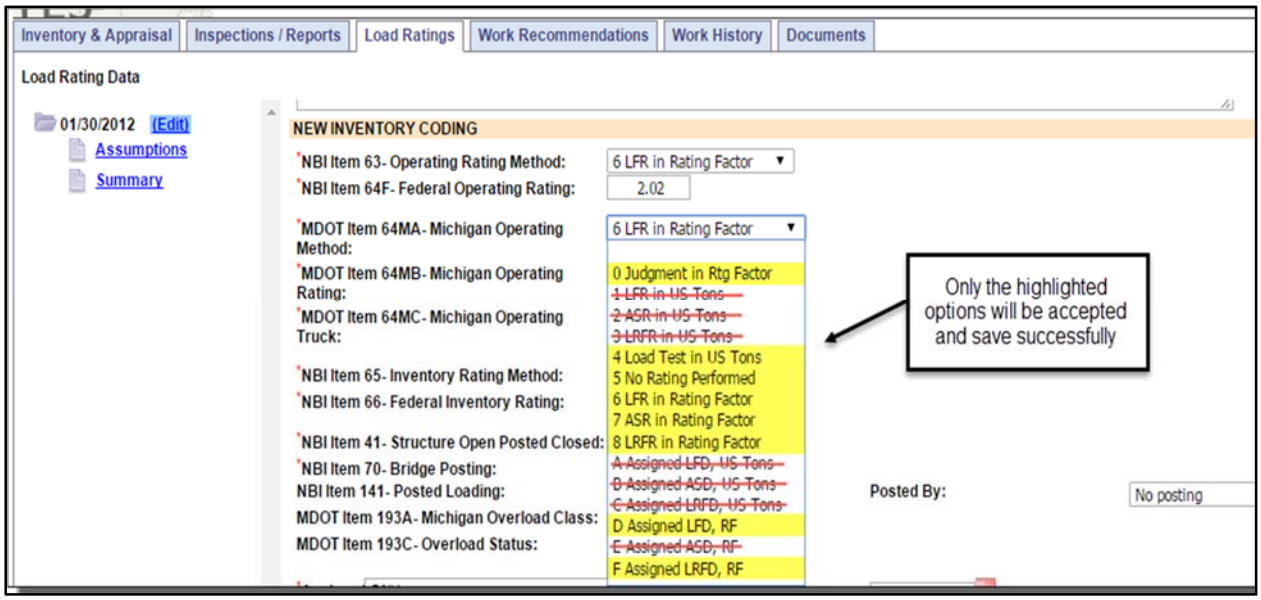
Beginning August 20, 2016, all load rating values must be reported as a Rating Factor on the Load Rating Summary form in MDOT's MiB[RIDG]E web application. NBI Item 63 – Operating Rating Method and NBI Item 65 – Inventory Rating Method will no longer be accepted in units of Metric Tonnage. MDOT Item 64MA – Michigan Operating Method will no longer be accepted in units of US Tonnage. Note that an Assigned Rating using ASD, though represented as a rating factor, is also no longer accepted (see BA-2016-02).

All rating methods will continue to appear on the drop-down menu in MiBRIDGE, but only Rating Method choices 0, 4, 5, 6, 7, 8, D and F, highlighted below, will save successfully. All other selections will result in an error message upon attempting to save.

This update is in anticipation of upcoming Federal guidelines and regulations which limit the Load Rating Method entry to Rating Factor only. MDOT's MiB[RIDG]E web application is scheduled to be offline from August 16, 2016 through August 19, 2016 to install this and other updates to the bridge management database.



Below are examples of the conversion from tonnage to rating factor for both Federal and Michigan vehicles.

Federal Inventory Rating, Item 66 or Federal Operating Rating, Item 64F

EXAMPLE: Convert 44.73 Metric Tons to Rating Factor

1. Convert from metric tons to tons

$$44.73\ mTons\ x\ \frac{1\ ton}{0.907\ mTons} = 49.32\ tons$$

2. Divide the tonnage by the weight of the HS20 truck

$$RF = \frac{49.32\ tons}{36\ tons} = 1.37$$

Michigan Operating Rating, Item 64M

EXAMPLE: Convert 124.32 US Tons to Rating Factor for Michigan Truck 18 – Designated Loading

1. Divide the tonnage by the weight of the Michigan vehicle
   (See Bridge Analysis Guide, Table 4a-1 for gross vehicle weights)

$$RF = \frac{124.32\ US\ Tons}{77\ US\ tons} = 1.61$$